REMARKS

Claims 22-88 are pending in the Application and all are rejected in the Office action mailed September 7, 2006. Claims 73 and 85 are amended by this response. Claims 22, 39, 58 and 73 are independent claims. Claims 23-38, 40-57, 59-72 and 74-88 depend from independent claims 22, 39, 58 and 73, respectively.

The Applicants respectfully request reconsideration of the pending claims 22-88, in light of the following remarks.

Objections to Claims

Claims 73 and 85 were objected due to the use of allegedly optional claim language. Applicants respectfully disagree with the objections. However, Applicants have amended claims 73 and 85 as shown above, to further clarify the subject matter of the claims, and to remove the objectionable language. Therefore, Applicants respectfully request that the objections to claims 73 and 85 be withdrawn.

Claim 79 was objected to due to an alleged lack of clarity in the language of the claim. The Office action states that "…[i]t is suggested to clarify whether "a packet" recited in line 3 is the same packet as "a packet recited in line 2. It is also unclear whether "**a packet sent to the communication device**" in line 2 is "a digital voice packet" (claim 73, line 9) or "a data packet" (claim 73, line 11)." (emphasis in original)(Office action, page 2, line 13-16) Applicants respectfully submit that the language of claim 79 is clear, and that the limitations "a packet sent <u>to</u> the communication device" and "a packet sent <u>by</u> the communication device" are clear and the meaning thereof is able to be immediately recognized by one of skill in the art. The Applicants also believe that dependent claim 80 provides additional limitations that further clarify the subject matter of claim 79. Therefore, Applicants respectfully request that the objection to claim 79 be withdrawn.

Rejections of Claims

New Rejections of Claims under 35 U.S.C. §102

Claims 22, 24, 25, 28-30, 33-39, 41, 42, 45-47, 50-58, 61, 63-66, 69-73, 76 and 82-84 were rejected under 35 U.S.C. §102(b) as being anticipated by Berken (WO 91/08629) The Applicants respectfully traverse the rejection.

With regard to the anticipation rejections, MPEP 2131 states, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 2 USPQ2d 1051, 1053 (Fed.Cir. 1987). MPEP 2131 also states, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Regarding claims 22, 39, 58, and amended claim 73, Applicants respectfully submit that Berken fails to teach, suggest or disclose, at least, "...wherein digital voice packets wirelessly exchanged by the at least one portable terminal comprise destination information used for routing the digital voice packets through the communication network...", as recited in Applicants' claim 22; "...wherein the packets comprising digital representations of sound also comprise destination information used for routing the packets through the communication network...", as recited in Applicants' claim 39; and "...wherein digital voice packets wirelessly exchanged by the communication device and the at least one access device comprise destination information used for routing the digital voice packets through the communication network...", as recited in Applicants' claims 58 and 73.

The Office action states that Berken discloses "...wherein digital voice packets wirelessly exchanged by the at least one portable terminal comprise destination information used for routing (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header for the voice time slot) the digital voice data packets through the communication network (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises target/destination routing/information through PSTN, Ethernet LAN, or Token Ring LAN)." (Office action page 5, lines 10-17) The text cited in the Office action suggests correspondence between the

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"destination information used for routing" of Applicants' claims 22, 39, 58 and 73, and the control time slot and/or packet header for the voice time slot. Applicants respectfully disagree with the suggested correspondence, and submit that there is no valid basis for alleging such a correspondence.

Applicants respectfully submit that Berken teaches a wireless in-building telecommunication system for voice and data communication having at least one node and a multiplicity of user modules linked to the node via a shared RF communications path. (Abstract) Time on the shared RF communications path is divided into frames, each frame comprising a number of time slots that are divided into two basics groups, node transmit and node receive, and that each of the two groups are further divided into three subgroups, control time slots, voice time slots and data time slots. (FIG. 2; page 10, lines 16-22; FIG. 3; page 9, lines 2-5) Each time slot contains a packet of information that is divided into four parts: bus control, packet preamble, packet header, and packet information, and the voice, data or system control information is contained in the packet information portion. (page 9, lines 6-9; page 10, line 19-20) The time slots within the frames are assigned for the use of the nodes and the multiplicity of user modules according to a bandwidth allocation scheme in which, when a module requires bandwidth, it will use a predetermined control time slot to request bandwidth from the node, and a time slot or group of time slots is then assigned to that module for its use. (Abstract; page 2, line 24 to page 3, line 18; page 9, lines 18-27; page 11, lines 3-6) Accordingly, Applicants respectfully submit that the individual time slots of any frame may be directed to any of a multiplicity of users.

The Applicants respectfully submit that the "control time slot" of Berken does not carry "digital voice packets", as recited in claims 22, 58 and 73, nor does it carry "packets comprising digital representations of sound", as recited in Applicants' claim 39. Applicants respectfully submit that the control time slot of Berken is separate from the voice time slot, and that voice packets are contained within a voice time slot within a frame, and not within a control time slot. Any routing information alleged to be contained within packets in the control time slot is, therefore, not contained within a voice packet. This is different from and fails to anticipate Applicants' claims 22, 39, 58 and 73. Applicants respectfully submit that none of FIG. 3, the "control time slot", FIG. 4, nor any other disclosure of Berken teaches "...wherein digital voice packets wirelessly exchanged by the at least one portable terminal comprise destination information used for routing the digital voice packets through the communication network...", as recited in

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Applicants' claim 22; "...wherein the packets comprising digital representations of sound also comprise destination information used for routing the packets through the communication network...", as recited in Applicants' claim 39; and "...wherein digital voice packets wirelessly exchanged by the communication device and the at least one access device comprise destination information used for routing the digital voice packets through the communication network...", as recited in Applicants' claims 58 and 73.

Applicants also respectfully submit that the "packet header for the voice time slot" that the Office action alleges as teaching "...digital voice data packets wirelessly exchanged by the at least one portable terminal comprise destination information used for routing..." does not comprise "...destination information used for routing the digital voice packets through the communication network ...", as recited in claim 22; "...destination information used for routing the packets through the communication network ...", as recited in claim 39; and "...comprise destination information used for routing the digital voice packets through the communication network ...", as recited in claims 58 and 73. Berken fails to teach anything about the contents of the packet header illustrated in FIG. 4.

To the contrary, Berken teaches that "...[w]hen a request is made for voice information transfer, a time slot is allocated for the duration of the call – this is known as a '**circuit switched path**'". (emphasis added) (page 10, lines 30-32) Applicants respectfully submit that the "circuit switched path" taught by Berken is fundamentally different from and fails to anticipate use of digital voice packets/digital voice data packets that comprise destination information used for routing, as set forth in Applicants' claims 22, 39, 58 and 73. As is notoriously well known in the art, a "circuit switched path" is established from a point of origin to a destination, before information is transferred over the path, and that packets of information are not routed over the "circuit switched path" based on destination information contained within the packets. Therefore, the Applicants respectfully submit that the "packet header for the voice time slot" of Berken fails to teach or suggest the "digital voice packet/digital voice data packet" recited in Applicants' claims 22, 39, 58 and 73.

Based at least upon the above, the Applicants respectfully submit that Berken fails to teach all of the elements of Applicants' claims 22, 39, 58 and 73 as required by MPEP §2131, that Berken fails to anticipate Applicants' claims 22, 39, 58 and 73, and that the rejection of claims 22, 39, 58 and 73 cannot be maintained.

Applicants believe, therefore, that claims 22, 39, 58 and amended claim 73 are allowable over Berken. Applicants respectfully submit that claims 23-38, 40-57, 59-72 and 74-88 depend either directly or indirectly from claims 22, 39, 58 and 73, respectively. Because claims 23-38, 40-57, 59-72 and 74-88 depend, respectively, from claims 22, 39, 58 and 73, Applicants respectfully submit that claims 23-38, 40-57, 59-72 and 74-88 are allowable as well, for at least the same reasons. Therefore, Applicants respectfully request that the rejection of claims 22, 24, 25, 28-30, 33-39, 41, 42, 45-47, 50-58, 61, 63-66, 69-73, 76 and 82-84 under 35 U.S.C. §102(b) be withdrawn.

New Rejections of Claims under 35 U.S.C. §103

With regard to an obviousness rejection, MPEP 2142 states that in order for a prima facie case of obviousness to be established, three basic criteria must be met, one of which is that the reference or combination of references must teach or suggest all the claim limitations. Further, MPEP 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination", and that "although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so'" (citing In re Mills, 916 F. 2d 680, 16 USPQ 2d 1430 (Fed Cir. 1990)). Moreover, MPEP 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion...," citing Al-Site Corp. v. VSI Int'l Inc., 174 F. 3d 1308, 50 USPQ 2d. 1161 (Fed Cir. 1999).

Applicants respectfully submit that the Office action has failed to establish a *prima facie* case of obviousness of the following claims, for at least the reasons set forth below.

Claims 23, 40 and 81 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Cripps (US 5,838,730). Applicants respectfully traverse the rejection. Applicants respectfully submit that claims 23, 40 and 81 are dependent claims depending from independent claims 22, 39, and 73, respectively. Applicants believe that independent claims 22, 39 and 73 are allowable over the proposed combination of references, in that Cripps fails to overcome the deficiencies of Berken, as set forth above. Because claims 23, 40 and 81 depend

from allowable claims 22, 39 and 73, Applicants respectfully submit that claims 23, 40 and 81 are also allowable, for at least the reasons set forth above with respect to claims 22, 39 and 73. Therefore, Applicants respectfully request that the rejection of claims 23, 40 and 81 under 35 U.S.C. §103(a) be withdrawn.

Claims 26, 27, 31, 32, 43, 44, 48, 49, 59, 60, 62, 74 and 75 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Perkins (US 5,159,592). Applicants respectfully traverse the rejection. Applicants respectfully submit that claims 26, 27, 31 and 32, claims 43, 44, 48, and 49, claims 59, 60 and 62, and claims 74 and 75 are dependent claims depending from independent claims 22, 39, 58 and 73, respectively. Applicants believe that independent claims 22, 39, 58 and 73 are allowable over the proposed combination of references, in that Perkins fails to overcome the deficiencies of Berken, as set forth above. Because claims 26, 27, 31, 32, 43, 44, 48, 49, 59, 60, 62, 74 and 75 depend from allowable claims 22, 39, 58 and 73, Applicants respectfully submit that claims 26, 27, 31, 32, 43, 44, 48, 49, 59, 60, 62, 74 and 75 are also allowable, for at least the reasons set forth above with respect to claims 22, 39, 58 and 73. Therefore, Applicants respectfully request that the rejection of claims 26, 27, 31, 32, 43, 44, 48, 49, 59, 60, 62, 74 and 75 under 35 U.S.C. §103(a) be withdrawn.

Claim 67 was rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Callon et al. (US 5,251,205A, hereinafter "Callon"). Applicants respectfully traverse the rejection. Applicants respectfully submit that claim 67 is a dependent claim depending from independent claim 58. Applicants believe that independent claim 58 is allowable over the proposed combination of references, in that Callon fails to overcome the deficiencies of Berken, as set forth above. Because claim 67 depends from allowable claim 58, Applicants respectfully submit that claim 67 is also allowable, for at least the reasons set forth above with respect to claim 58. Therefore, Applicants respectfully request that the rejection of claim 67 under 35 U.S.C. §103(a) be withdrawn.

Claim 68 was rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Reece et al. (US 5,915,214A, hereinafter "Reece"). Applicants respectfully traverse the rejection. Applicants respectfully submit that claim 68 is a dependent claim depending from

independent claim 58. Applicants believe that independent claim 58 is allowable over the proposed combination of references, in that Reece fails to overcome the deficiencies of Berken, as set forth above. Because claim 68 depends from allowable claim 58, Applicants respectfully submit that claim 68 is also allowable, for at least the reasons set forth above with respect to claim 58. Therefore, Applicants respectfully request that the rejection of claim 68 under 35 U.S.C. §103(a) be withdrawn.

Claims 77-79 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Lewen et al. (US 5,341,374, hereinafter "Lewen"). Applicants respectfully traverse the rejection.

As an initial matter, Applicants' representative has been unable to identify the Lewen reference on any PTO-892 form issued by the Office in the Application. Applicants respectfully request that the Office identify the mailing date of the PTO-892 form on which the Lewen reference appears, or issue a PTO-892 form showing the Lewen reference.

With regard to claims 77-79, Applicants respectfully submit that claims 77-79 are dependent claims depending, either directly or indirectly, from amended independent claim 73. Applicants believe that independent claim 73 is allowable over the proposed combination of references, in that Lewen fails to overcome the deficiencies of Berken, as set forth above. Because claims 77-79 depends from allowable claim 73, Applicants respectfully submit that claims 77-79 are also allowable, for at least the reasons set forth above with respect to claim 73. Therefore, Applicants respectfully request that the rejection of claims 77-79 under 35 U.S.C. §103(a) be withdrawn.

Claims 80 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Lewen, and further in view of McKee et al. (US 5,477,531, hereinafter "McKee"). Applicants respectfully traverse the rejection.

As an initial matter, Applicants' representative has been unable to identify the McKee reference on any PTO-892 form issued by the Office in the Application. Applicants respectfully request that the Office identify the mailing date of the PTO-892 form on which the McKee reference appears, or issue a PTO-892 form showing the McKee reference.

With regard to claim 80, Applicants respectfully submit that claim 80 is dependent claims depending, either directly or indirectly, from amended independent claim 73. Applicants believe that independent claim 73 is allowable over the proposed combination of references, in that Lewen fails to overcome the deficiencies of Berken, as set forth above. Because claim 80 depends from allowable claim 73, Applicants respectfully submit that claim 80 is also allowable, for at least the reasons set forth above with respect to claim 73. Therefore, Applicants respectfully request that the rejection of claim 80 under 35 U.S.C. §103(a) be withdrawn.

Claims 85-88 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Focsaneanu et al. (US 5,610,910, hereinafter "Focsaneanu"). Applicants respectfully traverse the rejection. Applicants respectfully submit that claims 85-88 are dependent claims depending, either directly or indirectly, from amended independent claim 73. Applicants believe that independent claim 73 is allowable over the proposed combination of references, in that Focsaneanu fails to overcome the deficiencies of Berken, as set forth above. Because claims 85-88 depend from allowable claim 73, Applicants respectfully submit that claims 85-88 are also allowable, for at least the reasons set forth above with respect to claim 73. Therefore, Applicants respectfully request that the rejection of claims 85-88 under 35 U.S.C. §103(a) be withdrawn.

Original Rejections Under 35 U.S.C. §103

The instant Office action restates on pages 19-33, the rejections under 35 U.S.C. §103(a) set forth on pages 2-14 of the previous Office action (mailed May 2, 2006), that claims 22, 28, 29, 36-39, 45, 46, 53-58, 63, 66 and 69-72 are unpatentable over Sainton et al. (US RE38787, hereinafter "Sainton") and Drakopoulos et al. (US 5,506,848, hereinafter "Drakopoulos"), that claims 23, 24, 40 and 41 are unpatentable over Sainton, Drakopoulos and Cripps, that claims 25 and 42 are unpatentable over Sainton, Drakopoulos and Honig et al. (US 5,481,533, hereinafter "Honig"), that claims 26, 27, 30-32, 43, 44, 47-49 and 59-62 are unpatentable over Sainton, Drakopoulos and Perkins, that claims 33, 35 and 50 are unpatentable over Sainton, Drakopoulos and Doviak et al. (US 5,717,737, hereinafter "Doviak"), that claims 34, 51, 64 and 65 are unpatentable over Sainton, Drakopoulos and Weaver et al. (US 5,956,673, hereinafter "Weaver"), that claim 67 is unpatentable over Sainton, Drakopoulos and Callon, and that claim 68 is unpatentable over Sainton, Drakopoulos and Reece. The Applicants respectfully traverse

the rejections for at least the reasons set forth during prior prosecution, and maintain that the claims of the Application describe patentable subject matter. For reasons of brevity and clarity, Applicants hereby incorporate herein Applicants' prior responses of record in the Application.

Regarding Examiner's Response to Arguments

With regard to claims 22, 23-38, 40-57 and 59-72, Applicants respectfully maintain that the Sainton and Drakopoulos references, taken alone or in combination, fail to teach, suggest or disclose all of the limitations of Applicants' claimed inventions, for at least the reasons set forth below, and stated in prior Office action responses.

The Office action continues to allege that Sainton discloses "...wherein digital voice packets wirelessly exchanged by the at least one portable terminal comprise information for routing the digital voice packets through the communication network **(see col. 8, line 25 to col. 9, line 25; digitized voice packets/frames/data from the cellular phone comprise routing/forwarding information through the cellular telephone system)...**", and that "...[i]t is well known in the art when forming and routing packets/frames over the network to remote end/destination, one <u>must</u> use destination address/number/information to route. In particular, Drakopoulos teaches wherein the outgoing digital voice packets comprise destination information (i.e., signaling/control information) used for routing the outgoing digital voice packets through the wireless packet network **(see col. 5, line 31-42; using the address of the destination end user in voice packet for routing through the wireless network)**." (bold in original, underline added) (Office action, page 36, lines 8-18) The Applicants respectfully disagree with the allegations in the Office action regarding what the Sainton and Drakopoulos references allegedly teach or suggest.

Applicants respectfully submit that Sainton states, at col. 8, line 25 to col. 9, line 25:

> "FIG. 1B is a block schematic diagram of the input and control circuitry of omni-modal circuit 1. As can be seen from FIG. 1B, the input and control circuitry comprises speaker 100, microphone 102, voice processing circuitry 104, digital to analog converter 106, analog to digital converter 108, first selection switch 122, microprocessor 110, memory 112, data input 114, data output 116, data processing circuitry 118, second selector switch 120 and modem 124.

Microprocessor 110 is connected to memory 112 and operates to control the input circuitry as well as the programmable local oscillator 12 and switches 14 and 16 shown in FIG. 1A. Memory 112 can contain both data storage and program information for microprocessor 110. Microprocessor 110 may be any suitable microprocessor such as an Intel 80X86 or Motorola 680X0 processor. Memory 112 contains a program that allows microprocessor 110 to selectively operate the voice processing circuitry, data processing circuitry and switches to select the appropriate transmission channel for the communication signal currently being processed. In this manner, microprocessor 110 allows omni-modal circuit 1 to selectively operate on a plurality of radio communication systems.

As can be seen in FIG. 1B, an externally provided speaker 100 and microphone 102 are connected to voice processing circuitry 104. Voice processing circuitry 104 has output 142 and input 144. Voice processing output 142 is connected to switch 122. Similarly, voice processing input 144 is connected to switch 122. Switch 122, which may be an electronic analog switch, comprises two single pole double throw switches which operate in tandem to selectively connect voice output 142 and voice input 144 to appropriate data lines. Switch 122 is connected through control line 146 to microprocessor 110. Control line 146 allows microprocessor 110 to selectively operate switch 122 in response to commands received from the user or in response to a program in memory 112. In a first position, switch 122 connects voice processing input 144 to voice grade channel output 126. Referring to FIG. 1A, voice grade output 126 is connected to the output 26 of analog detector demodulator 18. In this manner, voice processing circuitry 104 is able to receive demodulated analog voice signals from analog detector demodulator 18. When voice processing input 144 is connected to 126, voice processing output 142 will be connected to voice input 130. As can be seen in FIG. 1A, voice input 130 is connected to voice grade channel input 30 of analog modulator 22. In this manner, voice processing circuitry 104 can transmit voice through the transmit circuitry of FIG. 1A.

If switch 122 is changed to its alternate state, voice processing input 144 will be connected to digital to analog converter 106. Digital to analog converter 106 is connected to digital input 128 which, referring to FIG. 1A, is connected to digital output 28 of digital demodulator 20. Digital to analog converter 106 acts to receive a digital information bit stream on digital input 128 and to convert it to an analog voice grade channel. The analog voice grade channel from digital to analog converter 106 is sent through voice input 144 to voice processing circuitry 104. Voice processing circuitry 104 can then amplify or alter the voice grade channel signal to the taste of the user and outputs the signal on speaker 100. Voice processing output 142 is connected to analog to digital converter 108 which in turn is connected to digital output 132. Digital output 132 is connected in FIG. 1A to digital input 32 and to digital modulator 24. In this manner, voice processing circuitry 104 is capable of transmitting a voice or other analog voice grade channel signal through a digital modulation system."

Applicants respectfully submit that the above text, specifically cited in the Office action, fails to teach anything regarding "…wherein digital voice packets wirelessly exchanged by the at least one portable terminal comprise destination information used for routing the digital voice packets through the communication network…", as recited in Applicants' claim 22; "…wherein the packets comprising digital representations of sound also comprise destination information used for routing the packets through the communication network…", as recited in Applicants' claim 39; and "…wherein digital voice packets wirelessly exchanged by the communication device and the at least one access device comprise destination information used for routing the digital voice packets through the communication network…", as recited in Applicants' claim 58 and 73. In fact, Sainton fails to teach anything either in the above-cited text, or in any other part of the Sainton reference, with respect to the routing of "digital voice packets" and "packets comprising digital representations of sound", and makes no mention of destination information used to route such packets. The Applicants respectfully submit that the Office has previously admitted that "…Sainton does not explicitly disclose destination information…", at page 5, line 8 of the prior Office action (mailed May 2, 2006).

The Office action continues to allege that "…[i]t is well known in the art when forming and routing packets/frames over the network to remote end/destination, one <u>must</u> use destination address/number/information to route…." (underline added)(Office action, page 36, lines 13-18). Applicants respectfully disagree. This statement alleges that digital voice packets routed through a network <u>always</u> comprise destination information for routing the digital voice packets through the network. <u>This allegation is not based in fact</u>.

The Applicants respectfully submit that it is <u>not a requirement</u> that digital voice packets comprise destination information when forming and routing packets/frames over a network. The following example provides support for Applicants' assertion.

Assume there exists a network of computers A, B and C, that computers A and B are interconnected by a direct communication path, and that computers B and C are interconnected by a direct communication path. These communication paths may be wired or wireless. Further assume that computer A wishes to send digital voice packets to computer C. Applicants respectfully submit that computer A only need communicate to computer B that all digital voice packets received from A should be sent to computer C. Computer A then sends digital voice packets destined for computer C to computer B, that then forwards the digital voice packets received from computer A to computer C. The digital voice packets sent by computer A are, therefore, routed from computer A to computer C, <u>but need not contain destination information for routing the digital voice packets through the network</u> from computer A through computer B to computer C. It is clear from this example that the statement in the Office action that "…it is well known in the art when forming and routing packets/frames over the network to remote end/destination, one <u>must</u> use destination address/number/information to route…", is <u>false</u>.

The Office action maintains that Drakopoulos teaches "…wherein the outgoing digital voice packets comprise destination information (i.e., signaling/control information) used for routing the outgoing digital voice packets through the wireless packet network **(see col. 5, lines 31-42; using the address of the destination end use in voice packet for routing through the wireless network)**." (bold in original) (Office action, page 36, lines 15-18) Applicants respectfully disagree.

Applicants respectfully submit that Drakopoulos teaches a system and method for assigning channels and time slots upon demand in a mobile communication system which supports wireless communication applications where both end users are mobile. (Summary, col. 1, lines 51-54) The system of Drakopoulos is, in fact, a circuit switched network that provides a direct path between mobile users.

With reference to FIG. 1, FIG. 2, FIG. 3, FIG. 4A and FIG. 4B, and related text (col. 3, line 23 to col. 4, line 53), Applicants respectfully submit that Drakopoulos discloses mobile users (216 of FIG. 2) each in communication with a radio exchange node (REN) (104) through RF distribution points (RDP) (106). The communication between the mobile users (216) and the RENs (104) uses a time division multiple access (TDMA) method. Communication between a mobile user (216) and an RDP (106) uses two types of RF channels, a control channel (214) carrying time slot requests and assignment messages, and a traffic channel (212) carrying voice and/or data. A system may utilize N traffic channels - N channels for uplink and N channels for downlink, where each traffic channel is on a different RF carrier (FIG. 3). The control channel (214) is on its own RF carrier. The time available on the traffic channels and the control channel is made up of a sequence of frames, each frame containing L time slots that may be assigned to a number of different mobiles.

Again with reference FIG. 1, FIG. 2, FIG. 3, FIG. 4A and FIG. 4B, and related text (col. 3, line 23 to col. 4, line 53), Applicants respectfully submit that Drakopoulos teaches that a mobile user wishing to send a voice or data packet to another mobile user sends a reservation request over the control channel through the RDP (106) to the REN (104). The reservation request may include location addresses of source and destination end users. The REN (104) assigns time slots and traffic channels to both mobiles, informs the sending and receiving mobiles (216) over their respective control channels (214) of the time slot and traffic channel assignments, and configures a switch (206) to pass signals received on the uplink traffic channel (212) and time slot assigned to the mobile of the source end user, to a time slot and transceiver downlink traffic channel (212) assigned to the mobile of the destination end user. The mobiles receive the assigned time slot and traffic channel information over their respective control channels (214), tune to the assigned traffic channels, and when the starting times of the assigned time slots arrive, the mobile of the source end user transmits the voice or data packet on the assigned RF uplink traffic channel. The switch (206) in the REN (104) passes a baseband or

intermediate frequency signal representing the received voice or data packet from the transceiver (210) supporting the traffic channel assigned to the mobile of the source end user, to the transceiver (210) supporting the traffic channel serving the mobile of the destination end user. The transceiver supporting the traffic channel assigned to the destination end user then sends the voice or data packet to the mobile of the destination end user. The voice packet is thereby passed from the mobile of the source end user to the mobile of the destination end user.

Applicants respectfully submit that Drakopoulos teaches a circuit switched network, not a packet switched network, and that voice packets are routed through the disclosed network based on time, and not on the contents of voice packets. The time slot and traffic channels are assigned to the mobiles of the source and destination end users, and the network interconnections are configured (i.e., the scheduler configures the switch and transceivers) <u>before</u> a voice packet is sent by the mobile source end user. The locations of the destination and source end users are sent by the source end user over a <u>control</u> channel, not a traffic channel, and therefore are not contained within a voice packet.

Additionally, Applicants respectfully submit that Drakopoulos teaches that the receiver of the transceiver supporting the traffic channel serving the source end user sends a baseband or intermediate frequency signal through the switch (206) to the transceiver supporting the traffic channel of the destination end user, but fails to teach where that baseband or IF signal is demodulated or decoded to extract destination information from a voice packet. (col. 4, lines 7-9) Drakopoulos fails to teach where the contents of a voice packet sent by the source end user as an baseband or IF signal is demodulated or decoded to make the information in the voice packet available for use in routing the voice packet through the network. Applicants respectfully submit, therefore, that Drakopoulos fails to teach or suggest routing using information in the voice packet.

Further, Applicants respectfully submit that Drakopoulos clearly states that "...time slots are used to transfer voice packet and/or data packets between mobile users 216 without buffering, **without processing packet headers,** without voice encoding/decoding, and without other transmission delays at the exchange node 104...", and "...[t]he system achieves high performance by allocating (upon request) a direct path between the mobile end users, which implies that **no buffering, processing of packet headers**, voice encoding/decoding or

transmission delays take place at the exchange node." (emphasis added) (col. 6, lines 50-54; col. 19, lines 57-64)

Based at least upon the above, Applicants respectfully submit that Drakopoulos fails to teach or suggest digital voice packets/digital voice data packets that comprise destination information for routing the digital voice packets/digital voice data packets through a network. Instead, Drakopoulos teaches a circuit switched network that provides a direct path between mobile users.

Therefore, based at least upon the reasons set forth above, the Applicants respectfully submit that Sainton and Drakopoulos, taken alone or in combination, fail to teach or suggest "...wherein digital voice packets wirelessly exchanged by the at least one portable terminal comprise destination information used for routing the digital voice packets through the communication network...", as recited in Applicants' claim 22; "...wherein the packets comprising digital representations of sound also comprise destination information used for routing the packets through the communication network...", as recited in Applicants' claim 39; and "...wherein digital voice packets wirelessly exchanged by the communication device and the at least one access device comprise destination information used for routing the digital voice packets through the communication network...", as recited in Applicants' claims 58 and 73.

The Office action asserts that "...[c]learly, examiner is asserting an entire TDMA frame as applicant [sic] digital voice packet since a frame has a destination information (in request channel for signaling/control) which [is] followed by [a] voice packet (in payload or voice packet channel)." (Office action, page 38, lines 8-11) The Applicants disagree with the assertion.

As set forth above with reference to the figures and text of Drakopoulos, Applicants respectfully submit that Drakopoulos teaches a <u>circuit switched network</u> arrangement that <u>does not</u> process packet headers. Applicants respectfully submit that routing the entire TDMA frame as a voice packet makes no technical sense, because it may contain voice time slots assigned to a number of different mobile users and would therefore carry voice content for all users to a single destination, and because a TDMA frame is only used on the wireless interface between the mobile telephone and the base station, where no routing occurs. The Applicants also respectfully submit that the destination information that the Office action alleges to exist in the "request channel for signaling/control" would not, in fact, be carried on the traffic channel that carries the

TDMA frame, but would be carried on the control channel of Drakopoulos, on a separate RF channel, and therefore not be part of the TDMA frame on the traffic channel. Therefore, the voice packet would not comprise the destination information for routing the voice packet through the network.

Based at least upon the above, Applicants respectfully submit that Examiner's assertion is not supported by the teachings of Drakopoulos.

Based at least on the above, Applicants respectfully submit that Sainton and Drakopoulos, taken alone or in combination, fail to teach or suggest all of the limitations of Applicants' claimed invention.

The Examiner states that he "…does not understand the applicant argument of 'using destination information for routing digital voice packets through the communication network' is not well established or well known in the art. How could one make a phone call to the remote user, but not defining [sic] a remote user address/telephone use [sic] for routing a call through the network? How could one mail a letter to the other person, but not writing [sic] the destination address used for routing the letter? It is clear to one [of] ordinary skill in the art that it would be impossible 'not to include destination information' use [sic] for routing a call/mail to the receipt [sic], and 'destination information' must [be] contain [sic] in the frame/packet which is routed over the network." (underline in original) (Office action, page 38, line 16 to page 39, line 2) The Applicants respectfully disagree with the Examiner.

The Applicants respectfully submit that placing a phone call is different from the routing of a voice packet. The example set forth is that of a user entering information identifying a called party for a call through a circuit switched network, which is different from and does not teach the use of voice packets in a packet network.

Similarly, the mailing of a letter is also different from and does not teach the use of voice packets in a packet network. If the Examiner believes that the comparison is valid, the Examiner is requested to identify and cite, in a subsequent Office action, a reference setting forth relevant teachings from such a reference.

Applicants respectfully submit that the assertion that "it would be impossible 'not to include destination information' use [sic] for routing a call/mail to the receipt [sic], and 'destination information must [be] contain [sic] in the frame/packet which is routed over the

network…" (Office action, page 30, lines 2-4) was previously addressed above, and was shown to be <u>false</u>.

The Office action alleges that "…it is so well known in the art that TDMA or radio frame contains destination for routing through the communication network…" (Office action, page 39, lines 3-4), and identifies a number of alleged prior art references. Applicants' representative respectfully requests that if the Examiner feels that the identified documents represent valid prior art, that the Office cite the relevant teachings identifying the related references in properly presented rejections in a subsequent Office action, along with the rationale for selection of such reference(s) and teachings.

The Office action asserts (Office action, page 40, lines 5-7) that "…once [sic, one] skilled in the ordinary art would clearly evident [sic] that a "packet header" must contains [sic, contain] "destination information" when sending from one end to the other end. The Applicants respectfully disagree, for at least the reasons set forth above in the example of routing packets without destination information.

Based at least upon the above, Applicants respectfully maintain that the Sainton and Drakopoulos references, taken alone or in combination, fail to teach or suggest all of the limitations of Applicants' claimed invention, as required by M.P.E.P. §2142, for at least the reasons set forth above, and as set forth in the prior Office action responses. Applicants respectfully submit, therefore, that rejections of claims 22-72 under 35 U.S.C. §103(a) in view of Sainton and Drakopoulos cannot be maintained, and that claims 22-72 are allowable over the proposed combination of Sainton and Drakopoulos.

Conclusion

The Applicants believe that all of pending claims 22-88 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to telephone the undersigned at (312) 775-8000. If the Examiner maintains his rejections, the Applicants hereby respectfully request an interview with the Examiner.

A Notice of Allowability is courteously solicited.

The Commissioner is hereby authorized to charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 13-0017.

Respectfully submitted,

Dated: March 6, 2007   /Kevin E. Borg/
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